REMARKS

Status Of Application

Claims 1-30 are pending in the application; the status of the claims is as follows:

Claim 30 is objected to because of informalities;

Claims 7, 8, 14, 16, and 28-30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite;

Claims 26-28 are rejected under 35 U.S.C. § 102(b) as being unpatentable over Kawashima et al., U.S. Patent No. 6,079,862;

Claims 1-8, 13, 14, and 16-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., U.S. Patent No. 7,161,614 B1;

Claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., as applied to claim 1 above, and further in view of Greenberg et al., U.S. Patent No. 3,267,431;

Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., and further in view of Mertelmeier et al., U.S. Application Publication No. 2003/0081821 and further in view of Cham et al., U.S. Patent No. 6,597,801 B1;

Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., and further in view of Bos et al., U.S. Patent No. 6,396,397 B1 and Examiner's Official Notice;

Claims 29 and 30 are rejected 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Baker et al., U.S. Patent No. 3,564,132; and

Claims 15, 24, and 25 rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., as applied to claims 1 and 21 above, and further in view of Baker et al.

By this response, independent claims 1, 17, 21 and 26 have each been amended to more particularly point out and distinctly claim the invention of these claims. Claims 14, 28

and 29 have been amended to improve the form thereof and to address the section 112 rejections raised by the examiner. Claim 30 has also been amended to address the objection of this claim raised by the examiner. Claim 13 has been amended to correct a typographical error.

The courtesy of Examiner Yuan to grant applicant's attorney an interview on July 30, 2007 is noted with appreciation. The amendments and remarks herein are consistent with the comments offered in the interview.

The rejection of claims 7, 8, 14, 16, and 28-30 under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, is respectfully traversed based on the following.

The Examiner has maintained the section 112 rejection of claims 7 and 8 asserting that the terms symmetrically and synchronously are an incorrect description of the how the cameras are moved. In the last response, applicants pointed out that the terms are being used according to their ordinary meaning. By this response, applicant again respectfully submits that the terms are being used precisely in accordance with the ordinary meaning of these words. It appears that the Examiner has viewed the use of symmetrically and synchronously as being synonymous with panning and tilting. However, it is respectfully submitted that this would be a misunderstanding. Instead, it is submitted that this is not how the terms are used in the specification. Instead, the specification and claims use these terms consistent with their ordinary meaning and not merely as a substitute for panning and tilting.

Specifically, the specification teaches that the "control **may be so performed that** the pan mechanisms 12 and 22 make the cameras 11 and 21 move symmetrically." (para 50) By saying that the control may be "**so performed that ...**," it is clear that the specification is describing a particular form of motion – i.e., symmetric motion – and not merely that the cameras are panned. Similarly, the specification teaches that "control may be so performed that . . . the tilt mechanisms 13 and 23 make the cameras 11 and 21 move synchronously."

(para 50). Again, it is clear that the specification is describing a particular form of motion – *i.e.*, synchronous motion – and not merely that the cameras are tilted.

Thus, the current specification provides literal support for the language of the claims and makes clear that the phrases in the claims refer to the type of control described in the specification.

Here, the present specification provides a description of how the cameras may be moved relative to each other and provides literal antecedent support for the language in claims 7 and 8. There is no indication that the terms are being used in a manner contrary to their ordinary meaning. Indeed, it is apparent from the specification that the terms are being used in accordance with their ordinary meaning. For this reason, the claims as submitted are considered to be clear and definite and to comply with the requirements of section 112.

By this response, claim 14 has been amended to improve the form thereof and to address the section 112 rejection raised by the examiner. Similarly, claims 28 and 29 have been amended to clarify which "image data" is being referred to and to present "an absence" of an object in correct form.

With respect to the section 112 rejection of claim 30, it is believed that this rejection was intended for claim 29. By this response, claim 29 has been amended to describe the absence of an object in improved form to address the section 112 rejection thereof.

Accordingly, it is respectfully requested that the rejection of claims 7, 8, 14, 16, and 28-30 under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, be reconsidered and withdrawn.

35 U.S.C. § 102(b) Rejection

The rejection of claims 26-28 under 35 U.S.C. § 102(b) as being unpatentable over Kawashima et al., is respectfully traversed based on the following.

The present claims are directed to a system which may be suitable for detecting objects for surveillance and/or robotic applications. As described in the present specification, different ones of the disclosed embodiments employ at least two cameras to perform two-dimensional and stereoscopic measurements to detect objects. By providing a system that can perform object detection in two manners and which selectably performs the two-dimensional and stereoscopic processes to detect objects using the same cameras, a simplified system can be achieved which varies the type of object detection process used so as to balance speed and accuracy.

This can be seen in claim 26 which, as presently amended, recites:

> A surveillance control and object detection apparatus for controlling at least two cameras and for detecting objects based on image data obtained from the cameras, the apparatus comprising:
>
> a camera positional control device which is configured to generate signals to control the positions of the cameras to change photographing directions of the cameras;
>
> a two-dimensional image processing system which is configured to perform two-dimensional evaluation of image data obtained by at least a first one of the cameras to detect an object;
>
> a stereoscopic image processing system which is configured to perform stereoscopic evaluation of image data obtained from both the first one of the cameras and a second one of the cameras to detect an object; and
>
> a controller which is configured to control the operation of the cameras and the camera positional control device, said controller also being configured to control a mode of operation of the apparatus such that in a first mode image data obtained by at least a first one of the cameras is evaluated by said two-dimensional image processing system and in a second mode image data obtained from both the first one of the cameras and a second one of the cameras are evaluated by said stereoscopic image processing system, said controller further being configured to switch between said first and second modes of operation based on a current mode of said apparatus and an output

> from one of the two-dimensional image processing system and the stereoscopic image processing system;
>
> wherein said controller is configured to respond to the detection of an object by said two-dimensional image processing system based on an image obtained by at least first one of the cameras, said controller being configured to respond by controlling the positions of the at least a first and a second one of said cameras, based on a detected position of the object by said first one of the cameras, so that the cameras photograph an overlapping range which includes the detected object.

Thus, claim 26 as now presented, claims an apparatus that uses at least two cameras and which processes image data from one or more of the cameras through a two-dimensional image processing system and/or a stereoscopic image processing system. The system includes a controller which controls the operation of the cameras and the camera positional control device. The controller is configured such that when the two-dimensional image processing system detects an object (based on an image obtained by at least a first one of the cameras), the controller responds to the detection and uses the detected position of the object to control the positions both of the first and second cameras so that both the first and second cameras photograph an overlapping range which includes the object.

Thus, the apparatus of claim 26 is a system which reacts when image data from one camera reveals a detected object. That is, when an object is detected from one image, the controller responds – using the position detected from the first camera – to control the positions of at least two cameras so that the cameras photograph an overlapping range which includes the detected object.

An example of this concept is described in paragraph [0038] of the current specification:

> [0038] In the case of using the monitoring system 1 for security, the two-dimensional processing portion 41 detects, for example, an intruder as the object based on the two images D1 and D2 obtained by shooting ranges differing from each other. In accordance with the position and posture of each of the cameras 11 and 21, and the position and size of the object seen in the

> images D1 and D2, the two-dimensional processing portion 41 outputs information of a rough position of the intruder and rough size thereof to the controller 43 as the measurement data D3. The controller 43 controls the position, the posture and the zooming operation of each of the cameras 11 and 21 so that the intruder can be zoomed in. The stereo processing portion 42 conducts three-dimensional measurement based on the images D1 and D2, then to output information indicative of the position of the intruder, i.e., the distance away from the intruder, and the size of the intruder to the controller 43 as the measurement data D4.

Thus, the controller of the present claim is responsive to the detection of an object by one of the cameras so as to change the positions of the first and second cameras to overlap the viewing ranges thereof to include the detected object. The controller also has other characteristics relating to control of the mode of operation of the system.

As the present specification describes, this type of arrangement provides great efficiency and allows multiple cameras to work either independently or together depending on whether or not any of the cameras have detected an object. As a result, the present invention provides unique advantages over the system of Kawashima.

In order to anticipate claim 26, the cited reference must disclose every limitation of the claim. As discussed below, Kawashima does not disclose all of the limitations of claim 26.

Kawashima does not appear to disclose a system which coordinates the control of two cameras in response to the detection of an object by one of the cameras in a way so as to change the positions of the first and second cameras to overlap the viewing ranges thereof to include the detected object.

Kawashima (and in particular the fourth embodiment shown in Fig. 14), discloses a system with two cameras. According to the description thereof beginning in column 15, the two cameras 4a and 4b each track the movement of the target to be lighted. The detection of the object by each camera is independent (as can be understood by the specification which says that the automatic tracking is similar to the first and third embodiments, each of which

only include a single camera). In the fourth embodiment of Kawashima, the two cameras separately track the object and once each has detected the object, the two dimensional coordinates provided by each camera can be used, via a three dimensional coordinate calculation unit, to control the direction of the spotlight 1.

Kawashima does not disclose or suggest that when an object is detected by one of the cameras that the controller uses the detected position of the object from that first camera to change the positions of both the first and second cameras to overlap the viewing ranges thereof to include the detected object. Because Kawashima fails to disclose this element of the claim, Kawashima cannot anticipate claim 26, or claims 27 and 28 which depend therefrom.

Accordingly, it is respectfully requested that the rejection of claims 26-28 under 35 U.S.C. § 102(b) as being unpatentable over Kawashima et al., be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejections

The rejection of claims 1-8, 13, 14, and 16-23 under 35 U.S.C. § 103(a), as being unpatentable over Kawashima et al. in view of Yamashita et al., is respectfully traversed based on the following.

As noted above, the present claims are directed to a system which may be suitable for detecting objects for surveillance and/or robotic applications. As described in the present specification, different ones of the disclosed embodiments employ at least two cameras to perform two-dimensional and stereoscopic measurements to detect objects. By providing a system that can perform object detection in two manners and which selectably performs the two-dimensional and stereoscopic processes to detect objects using the same cameras, a simplified system can be achieved which varies the type of object detection process used so as to balance speed and accuracy.

This can be seen in claim 1 which, as presently amended, recites:

> A measurement system for measuring an object based on images obtained by plural cameras, the system comprising:
> a positional control portion for controlling positions of the cameras to change photographing directions of the cameras;
> a two-dimensional measurement portion for conducting two-dimensional measurement of the object based on the image of the object, the image being obtained by at least one of the cameras;
> a stereoscopic measurement portion for conducting stereoscopic measurement of the object based on the images of the object, the images being obtained by at least two of the cameras, said at least two cameras including at least the camera for providing an image for the two-dimensional measurement portion; and
> a switching portion for switching between the two-dimensional measurement portion and the stereoscopic measurement portion to perform an operation;
> wherein said positional control portion is configured to respond to the detection of an object by said two-dimensional measurement portion based on an image obtained by at least first one of the cameras, said positional control portion being configured to respond by controlling the positions of the at least a first and a second one of said cameras, based on a detected position of the object by said first one of the cameras, so that the cameras photograph an overlapping range which includes the detected object.

Thus, claim 1 as presently presented, claims an apparatus which uses plural cameras and which processes image data from one or more of the cameras through a two-dimensional measurement portion and/or a stereoscopic measurement portion. The system includes a switching capability for switching image processing between the two measurement portions. The positional control portion configured such that when the two-dimensional measurement portion detects an object based on an image obtained by one of the cameras, the positional control portion uses that detected position of the object (as determined from the image from one camera) to control the positions at least two cameras so that both of the cameras photograph an overlapping range which includes the object.

Thus, in the system of claim 1, the position of an object detected from an image from one camera is used to control the position of a second camera. And, moreover, the position of an object detected from an image from one camera is used to control more than one

camera so that at least two cameras are directed to photograph an overlapping area which includes the detected object.

As the present specification describes, this type of arrangement provides great efficiency and allows multiple cameras to work independently or together depending on whether or not any of the cameras have detected an object. As a result, the present invention provides unique advantages over the systems of Kawashima and Yamashita.

In order to render obvious the invention of claim 1, Kawashima and Yamashita, singly or in combination must disclose every limitation of the claim. As described more fully below, the references do not disclose every element of claim 1 and thus cannot render obvious this claim.

As discussed above with respect to the section 102 rejection of claim 26, Kawashima (and in particular the fourth embodiment shown in Fig. 14), discloses a system with two cameras. The two cameras 4a and 4b each track the movement of the target to be lighted. Importantly, in contrast to the invention of claim 1, the detection of the object by each camera in Kawashima is independent. The two cameras separately track the object and once each has detected the object, the two dimensional coordinates provided by each camera can be used, via a three dimensional coordinate calculation unit, to control the direction of the spotlight 1.

Kawashima does not disclose or suggest that when an object is detected by one of the cameras that the detected position of the object from that first camera be used by the system to change the positions of the cameras to overlap the viewing ranges thereof to include the detected object. For this reason, Kawashima cannot render obvious claim 1.

Additionally, it is noted that the Examiner has acknowledged that Kawashima does not expressly disclose that switching occurs by a switching portion.

Yamashita discloses a system for converting two-dimensional video to three-dimensional video. Yamashita teaches that a two-dimensional video stream can be made to

have a stereoscopic even when movement is present in the video. In particular, Yamashita teaches that separate frames (of 2D video) can be prepared for the left and right eye, respectively. Based on motion detected in the video, a "switching means" switches which frame of 2-D video is used as the right eye video and which is used as the left eye video.

While Yamashita discloses switching between one of several frames of video to be used for each eye, Yamashita fails to disclose or suggest what is required by claim 1 – i.e., a switching portion for switching between the two-dimensional measurement portion and the stereoscopic measurement portion to perform an operation. The claim requires a portion which changes the operation of the device between a first approach where the two-dimensional measurement portion is used to perform an operation and a second approach where the stereoscopic measurement portion to perform an operation. In contrast, Yamashita merely selects which one of the frame of video is to be used. Thus, Yamashita fails to disclose the switching device of claim 1.

Yamashita also fails to disclose the positional control portion required by claim 1. As noted above, the positional control portion is configured so that when said two-dimensional measurement portion detects an object based on an image obtained by one of the cameras, the positional control portion uses the detected position of the object from that camera to control the positions of the cameras so that the cameras photograph an overlapping range which includes the object.

Thus, Yamashita and Kawashima each individually fail to disclose at least two elements of claim 1 and the combination of these references does not suggest these two elements. Because the references do not disclose all of the elements of claim 1 the references cannot render obvious this claim, or claims 2-8, 13, 14 or 16, which depend from claim 1.

Claim 17 is independent and claims 18-20 depend from claim 17. Claim 17, as presently amended, recites:

> A measurement system for measuring an object based on images obtained by two cameras, the system comprising:
>
> a camera position control system for outputting camera position control signals to change photographing directions of the cameras, said camera position control system being configured to enable control of directions of the two cameras independently from each other;
>
> a two-dimensional measurement device for conducting two-dimensional measurement of the object based on the image of the object, the image being obtained by at least one of the cameras;
>
> a stereoscopic measurement device for conducting stereoscopic measurement of the object based on the images of the object, the images being obtained by both of the cameras; and
>
> a switching device for switching between the two-dimensional measurement portion and the stereoscopic measurement portion to perform an operation;
>
> wherein said camera position control system is configured to respond to the detection of an object by said two-dimensional measurement device based on an image obtained by first one of the cameras, said camera position control system being configured to respond by controlling the positions of the first and a second one of said cameras, based on a detected position of the object by said first one of the cameras, so that the cameras photograph an overlapping range which includes the detected object.

Thus, claim 17 is directed to a system for measuring objects which uses at least two cameras and which processes image data from one or more of the cameras through a two-dimensional measurement portion and/or a stereoscopic measurement portion. The system includes a switching capability for switching image processing between the two measurement portions. The camera position control system is configured such that when the two-dimensional measurement device detects an object based on an image obtained by one of the cameras, the position control system uses that detected position of the object to control the positions of at least two cameras so that the cameras photograph an overlapping range which includes the object.

As discussed above, neither Kawashima nor Yamashita disclose or suggest a control device which is configured such that when an object is detected by one of the cameras, that the detected position of the object from that first camera is used by the system to change the positions of at least two cameras to overlap the viewing ranges thereof to include the detected object.

The Examiner has also acknowledged that Kawashima does not expressly disclose that switching occurs by a switching device. As discussed above, while Yamashita discloses switching between one of several frames of video to be used for each eye, Yamashita fails to disclose or suggest a switching device for switching between the two-dimensional measurement portion and the stereoscopic measurement portion to perform an operation. Claim 17 requires a device which changes the operation of the system between a first approach where the two-dimensional measurement device is used to perform an operation and a second approach where the stereoscopic measurement device to perform an operation. In contrast, Yamashita merely selects which one of the frame of video is to be used. Thus, Yamashita fails to disclose the switching device of claim 17.

Thus, Yamashita and Kawashima each individually fail to disclose at least two elements of claim 17 and the combination of these references does not suggest these two elements. Because the references do not disclose all of the elements of claim 17, the references cannot render obvious this claim, or claims 18-20, which depend from claim 17.

Claim 21 is independent and claims 22-25 depend from claim 21. Claim 21, as presently amended, recites:

> A measurement system for measuring an object based on images obtained by plural cameras, the system comprising:
> a positional control portion for controlling positions of the cameras to change photographing directions of the cameras;
> a two-dimensional measurement portion for conducting two-dimensional measurement of the object based on the image of the object, the image being obtained by at least one of the cameras;
> a stereoscopic measurement portion for conducting stereoscopic measurement of the object based on the images of the object, the images being obtained by at least two of the cameras; and
> a switching portion for switching between the two-dimensional measurement portion and the stereoscopic measurement portion to perform an operation, said switching portion being configured to control the provision of images from the cameras to the measurement portions such that said at least two of the cameras from which images are obtained for conducting stereoscopic measurement include said at least one of the cameras from which

> the image of the object is obtained for the two-dimensional measurement portion;
>
> wherein said positional control portion is configured to respond to the detection of an object by said two-dimensional measurement portion based on an image obtained by at least first one of the cameras, said positional control portion being configured to respond by controlling the positions of the at least a first and a second one of said cameras, based on a detected position of the object by said first one of the cameras, so that the cameras photograph an overlapping range which includes the detected object.

Thus, claim 21 is directed to a system for measuring objects which uses plural cameras and which processes image data from one or more of the cameras through a two-dimensional measurement portion and/or a stereoscopic measurement portion. The system includes a switching capability for switching image processing between the two measurement portions. The positional control portion is configured such that when the two-dimensional measurement portion detects an object based on an image obtained by one of the cameras, the positional control portion uses that detected position of the object (from one camera) to control the positions of at least two cameras so that the cameras photograph an overlapping range which includes the object.

As the present specification describes, this type of arrangement provides great efficiency and allows multiple cameras to work independently or together depending on whether or not any of the cameras have detected an object. As a result, the present invention provides unique advantages over the systems of Kawashima and Yamashita.

As discussed above, neither Kawashima nor Yamashita disclose or suggest a control portion which is configured such that when an object is detected by one of the cameras, that the detected position of the object from that first camera is used by the system to change the positions of the cameras to overlap the viewing ranges thereof to include the detected object.

The Examiner has also acknowledged that Kawashima does not expressly disclose that switching occurs by a switching device. As discussed above, while Yamashita discloses switching between one of several frames of video to be used for each eye, Yamashita fails to

disclose or suggest a switching device for switching between the two-dimensional measurement portion and the stereoscopic measurement portion to perform an operation.

Thus, Yamashita and Kawashima each individually fail to disclose at least two elements of claim 21 and the combination of these references does not suggest these two elements. Because the references do not disclose all of the elements of claim 21, the references cannot render obvious this claim, or claims 22-23, which depend from claim 21.

Accordingly, it is respectfully requested that the rejection of claims 1-8, 13, 14, and 16-23 under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., be reconsidered and withdrawn.

The rejection of claims 9 and 10 under 35 U.S.C. § 103(a), as being unpatentable over Kawashima et al. in view of Yamashita et al., as applied to claim 1 above, and further in view of Greenberg et al., is respectfully traversed based on the following.

Claims 9 and 10 depend from independent claim 1 and thus include all of the limitations of claim 1.

The present rejection applies Kawashima and Yamashita against claims 9 and 10 and adds the Greenberg reference for the proposition of a mode switch and/or alarm signal output. While Greenberg discloses producing an output indication of the identity of the specimen, Greenberg does not disclose or suggest either the switching portion or the particular positional control portion of claim 1. As discussed above, Yamashita and Kawashima each individually fail to disclose at least two elements of claim 1 and the combination of these references does not suggest these two elements. Greenberg fails to cure the deficiency in disclosing all of the elements of claim 1. Because Yamashita, Kawashima and Greenberg do not disclose all of the elements of claim 1, the references cannot render obvious this claim, or claims 9 and 10, which depend from claim 1.

Accordingly, it is respectfully requested that the rejection of claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., as applied to claim 1 above, and further in view of Greenberg et al., be reconsidered and withdrawn.

The rejection of claim 11 under 35 U.S.C. § 103(a), as being unpatentable over Kawashima et al. in view of Yamashita et al., and further in view of Mertelmeier et al. and further in view of Cham et al., is respectfully traversed based on the following.

Claim 11 depends from independent claim 1 and thus includes all of the limitations of claim 1.

The present rejection applies Kawashima and Yamashita against claim 11 and adds the Mertelmeier and Cham references for the proposition of reducing resolution of the images and switching between high resolution and low resolution to conduct stereoscopic measurement. Regardless of whether Mertelmeier and Cham disclose varying resolution of the images, Mertelmeier and Cham do not disclose or suggest either the switching portion or the particular positional control portion of claim 1. As discussed above, Yamashita and Kawashima each individually fail to disclose at least two elements of claim 1 and the combination of these references does not suggest these two elements. Mertelmeier and Cham fail to cure the deficiency in disclosing all of the elements of claim 1. Because Yamashita, Kawashima, Mertelmeier and Cham do not disclose all of the elements of claim 1, the references cannot render obvious this claim, or claim 11 which depends from claim 1.

Accordingly, it is respectfully requested that the rejection of claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., and further in view of Mertelmeier et al. and further in view of Cham et al, be reconsidered and withdrawn.

The rejection of claim 12 under 35 U.S.C. § 103(a), as being unpatentable over Kawashima et al. in view of Yamashita et al., and further in view of Bos et al. and Examiner's Official Notice, is respectfully traversed based on the following.

The rejection of claim 12 under 35 U.S.C. § 103(a), as being unpatentable over Kawashima et al. in view of Yamashita et al., and further in view of Bos et al. and Examiner's Official Notice, is respectfully traversed based on the following.

Claim 12 depends from independent claim 1 and thus include all of the limitations of claim 1.

The present rejection applies Kawashima and Yamashita against claim 12 and adds Bos et al. and Examiner's Official Notice for the proposition of separating primary colors with a color filter. Regardless of whether separating primary colors with a color filter was known, neither Bos et al. nor the Examiner's Official Notice address the switching portion or the particular positional control portion of claim 1. As discussed above, Yamashita and Kawashima each individually fail to disclose at least two elements of claim 1 and the combination of these references does not suggest these two elements. Bos et al. and Examiner's Official Notice fail to cure the deficiency in disclosing all of the elements of claim 1. Because Yamashita, Kawashima, Bos et al. and Examiner's Official Notice do not disclose all of the elements of claim 1, the references cannot render obvious this claim, or claim 12, which depends from claim 1.

Accordingly, it is respectfully requested that the rejection of claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., and further in view of Bos et al. and Examiner's Official Notice, be reconsidered and withdrawn.

The rejection of claims 29 and 30 under 35 U.S.C. § 103(a), as being unpatentable over Kawashima et al. in view of Baker et al., is respectfully traversed based on the following.

Claims 29 and 30 depend from independent claim 26 and thus include all of the limitations of claim 26.

The present rejection applies Kawashima against claims 29 and 30 and adds the Baker reference for the proposition of switching mode in the absence of an object. Regardless of whether Baker discloses switching a mode in the absence of an object, Baker does not disclose or suggest the particular controller of claim 26. As discussed above addressing the section 102 rejection of claim 26 over Kawashima, Kawashima fails to disclose a controller which is responsive to the detection of an object by one of the cameras so as to change the positions of the first and second cameras to overlap the viewing ranges thereof to include the detected object. Moreover, Baker fails to cure the deficiency in disclosing all of the elements of claim 26. Because Kawashima and Baker do not disclose all of the elements of claim 26, the references cannot render obvious this claim, or claims 29 and 30, which depend from claim 26.

Accordingly, it is respectfully requested that the rejection of claims 29 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Baker et al., be reconsidered and withdrawn.

The rejection of claims 15, 24, and 25 under 35 U.S.C. § 103(a), as being unpatentable over Kawashima et al. in view of Yamashita et al., as applied to claims 1 and 21 above, and further in view of Baker et al., is respectfully traversed based on the following.

Claim 15 depends from independent claim 1 and claims 24 and 25 depend from independent claim 21. Each dependent claim includes all of the limitations of its corresponding independent claim.

The present rejection applies Kawashima and Yamashita against the claims and adds the Baker reference for the proposition of switching mode in the absence of an object. Regardless of whether Baker discloses switching a mode in the absence of an object, Baker does not disclose or suggest the switching portion or the particular positional control portion

of claims 1 and 21. As discussed above, Yamashita and Kawashima each individually fail to disclose at least two elements of claims 1 and 21 and the combination of these references does not suggest these two elements. Baker fails to cure the deficiency in disclosing all of the elements of claim 1 or claim 21. Because Yamashita, Kawashima and Baker do not disclose all of the elements of claims 1 or 21, the references cannot render obvious these claims or claim 15 (which depends from claim 1) or claims 24 and 25 (which depend from claim 21).

Accordingly, it is respectfully requested that the rejection of claims 15, 24, and 25 under 35 U.S.C. § 103(a) as being unpatentable over Kawashima et al. in view of Yamashita et al., as applied to claims 1 and 21 above, and further in view of Baker et al., be reconsidered and withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are respectfully requested.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin LLP Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

and not submitted herewith should be charged to Sidley Austin LLP Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By: /Thomas N. Tarnay/ Reg. No. 41,341
Thomas N. Tarnay
Registration No. 41,341
Attorney for Applicants

TNT/llb:bar
SIDLEY AUSTIN LLP
717 N. Harwood, Suite 3400
Dallas, Texas 75201
Direct: (214) 981-3388
Main: (214) 981-3300
Facsimile: (214) 981-3400
September 28, 2007